



Why Did the Little Leaguer Chase His Sister?



For each exercise, write the letter of the answer in the box containing the exercise number. If the answer has a , shade in the box instead of writing a letter in it.



- | | | | |
|-------------------------------------|---------------------------------|---------------------------------|--|
| 1 $3n > 24$ | 2 $-3n > 24$ | 3 $n - 3 > 24$ | E $n > 27$ |
| | | | A $n > 8$ |
| | | | S $n < 27$ |
| | | | T $n < -8$ |
| 4 $-5y \leq 30$ | 5 $-5y \geq -30$ | 6 $5y \leq -30$ |  $y \leq 6$ |
| | | | B $y \geq 6$ |
| | | | S $y \leq -6$ |
| | | | I $y \geq -6$ |
| 7 $\frac{a}{2} < 9$ | 8 $-\frac{a}{2} > 9$ | 9 $-\frac{a}{2} < -9$ | V $a > -18$ |
| | | | A $a < -18$ |
| | | |  $a > 18$ |
| | | | E $a < 18$ |
| 10 $x + 7 \leq -4$ | 11 $\frac{x}{7} \geq -4$ | 12 $-\frac{x}{7} \geq 4$ | P $x \geq -28$ |
| | | | N $x \leq -28$ |
| | | | U $x \leq 28$ |
| | | | H $x \leq -11$ |
| 13 $32 > 16k$ | 14 $32 > -16k$ | 15 $-16k < -32$ |  $k > -2$ |
| | | | A $k < 2$ |
| | | | G $k > 2$ |
| | | | D $k < -2$ |
| * 16 $-\frac{1}{4}q \leq 20$ | 17 $-20 \geq q - 4$ | 18 $-20 \geq -4q$ | R $q \leq -16$ |
| | | | X $q \leq -5$ |
| | | | H $q \geq -80$ |
| | | |  $q \geq 5$ |
| 19 $15 > -\frac{1}{3}b$ | 20 $-15 < -\frac{b}{3}$ | 21 $-b > 45$ | F $b > 45$ |
| | | | C $b < -45$ |
| | | | W $b > -45$ |
| | | | Y $b < 45$ |
| 22 $60 \geq -12x$ | 23 $22 \geq x + 27$ | 24 $99 \leq -x$ | C $x \leq -99$ |
| | | | H $x \geq -5$ |
| | | |  $x \geq -99$ |
| | | | L $x \leq -5$ |

| | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|---|----|---|---|----|----|----|---|----|---|----|----|----|----|----|---|----|----|---|----|---|----|
| 16 | 3 | 9 | 19 | 1 | 6 | 14 | 11 | 23 | 8 | 20 | 4 | 12 | 15 | 18 | 21 | 13 | 2 | 24 | 10 | 5 | 22 | 7 | 17 |
|----|---|---|----|---|---|----|----|----|---|----|---|----|----|----|----|----|---|----|----|---|----|---|----|

①⑥ $-\frac{1}{4}q \leq 20$
Multiply Both Sides
by the reciprocal

$$-\frac{4}{1} \cdot -\frac{1}{4}q \leq 20 \cdot -4$$

$$q \geq -80$$

NAME _____

Use after page 3:

Two Step Inequalities.

$$\textcircled{15} -3x + 5 \geq -4$$

$$\begin{array}{r} -5 \\ -5 \end{array} \quad \text{(step 1)}$$

$$\frac{-3x}{-3} \geq \frac{-9}{-3} \quad \text{(step 2 } \rightarrow \div \text{ by } (-) \rightarrow \geq \rightarrow \leq)$$

To complete the fact card:

$$\textcircled{x \leq 3}$$

- First solve each inequality.
- Then find the word(s) written under each solution in the Decoder.
- Write the word(s) under the matching answer on the fact card.

$$\textcircled{15} \frac{x}{-9} - 4 < 13$$

$$\begin{array}{r} +4 \\ +4 \end{array} \quad \text{step 1}$$

$$\frac{(-9)}{1} \cdot \frac{x}{-9} < 17 \cdot (-9)$$

$$\textcircled{x > -153}$$

!! It's A Fact !!

| | | | | |
|--------------------------------|-----------------------|-------------------------------|-----------------------------|-----------------------------|
| 1. $6x - 12 < 6$ | 2. $-3x - 2 > 7$ | 3. $\frac{x}{4} - 3 < 1$ | 4. $\frac{x}{4} - 5 \leq 3$ | 5. $-3x + 5 \geq -4$ |
| 6. $-9x - 6 \geq 12$ | 7. $6x + 7 > -5$ | 8. $\frac{x}{7} + 10 \leq 16$ | 9. $-3x - 10 \geq 14$ | 10. $\frac{x}{12} - 6 > -3$ |
| 11. $\frac{x}{6} + 4 \geq -14$ | 12. $8x - 12 \geq -8$ | 13. $-10x + 12 > 17$ | 14. $-8x - 17 \leq 23$ | 15. $\frac{x}{9} - 4 < 13$ |

DECODER

| | | | | |
|-------------------------------------|----------------------------------|-----------------------------|-----------------------------------|-------------------------------|
| $x \leq 3$ MAY | $x \leq 32$ 1 CAR | $x > -2$ UP | $x > -16$ U.S. | $x > 36$ OF |
| $x \geq -5$ AIR | $x < \frac{-1}{2}$ THE | $x < 3$ IN | $x \geq -42$ TO | $x > -153$ ANNUALLY |
| $x \geq \frac{1}{2}$ INTO | $x \leq -2$ DISCHARGE | $x \leq -8$ 1 TON | $x \leq 108$ POLLUTANTS | $x < -3$ THE |